## REMARKS

Claims 1 and 3-10 are pending in the instant application. Claims 1 and 3-9 stand rejected under 25 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 3-10 stand rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 6,265,551 to Duke-Cohan et al. in view of WO 95/27438 to Balamore. Claim 1 has been amended. Applicants respectfully submit that none of the amendments constitute new matter in contravention of 35 U.S.C. §132. Reconsideration is respectfully requested.

Claims 1 and 3-9 stand rejected under 25 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, claim 1 recited "said assay reagent" without providing antecedent basis for the assay reagent. Applicants respectfully submit that the Examiner's rejections are obviated by the amendments to the claim 1. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 1 and 3-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 6,265,551 to Duke-Cohan et al. in view of WO 95/27438 to Balamore. This rejection is respectfully traversed.

Claim 1 is directed to an *in vitro* assay method which is a test involving a reaction of one or more biological molecules. Similarly, claim 10 is directed to an *in vitro* assay method for following the progress of a reaction of one or more biological molecules.

Duke-Cohan *et al* discloses s a conventional binding assay in which a labelled antibody is used to detect a protein.

Balamore is directed to imaging a biological structure, for example a lung.

The Examiner states that Duke-Cohan *et al* disclose the invention substantially as claimed. Howeverthe Applicants respectfully submit that this is the case. The various passages of this prior art document which are cited by the Examiner clearly establish that the assay described by Duke-Cohan *et al* is a conventional binding assay in which a labelled antibody is used to detect a protein.

Moreover, Applicants respectfully submit that it would not have been obvious to utilize $^{129}Xe$ as taught by Balamore as the detectable NMR label in the assay of Duke-Cohan *et al*. The antibody of Duke-Cohan *et al* may be directly labelled through coupling to a detectable substance, which may be a radioactive, fluorescent or enzymatic label (column 3, lines 53-53). In a preferred embodiment, the antibodies are incorporated into immunoconjugates consisting of an antibody molecule physically linked to a detectable substance. Examples of detectable substances include metal ions detectable by nuclear

magnetic resonance (column 3, lines 65-66). There is no suggestion that an NMR-detectable label could be anything other than a metal ion and certainly no suggestion that it could be a hyperpolarised noble gas.

Additionally, Balamore does not relate to an assay method which is an *in vitro* test involving a reaction of one or more biological molecules. As discussed in our response to the previous Official Action, Balamore relates to a method of taking static images of a biological system. The imaging of biological systems and the monitoring of the reaction of biological molecules are not in the same field of art and it is the submission of the Applicants that there is no reason why one of skill in the art of assay methods such as those taught by Duke-Cohan *et al* would consider using an imaging agent as taught by Balamore as a detectable label. There is certainly no teaching in Duke-Cohan *et al* that an NMR label could be anything other than a metal ion and also no reason to believe that there are any problems with the use of metal ions as NMR-detectable labels.

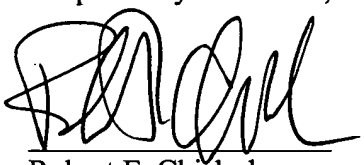
In addition, claim 10 of the present application relates to an assay method in which the progress of a reaction involving one or more biological molecules is followed by labeling an assay reagent with $^{129}Xe$ and observing a change with time of the $^{129}Xe$ NMR spectrum. There is no specific disclosure in Duke-Cohan *et al* of the monitoring of a reaction over a period of time and, as the Applicants pointed out in our response to the previous Official Action, Balamore relates to a method of taking static images of a biological system at a single time point.

Therefore, as neither of the cited references, either alone or in combination, disclose, teach, or suggest the present invention, Applicants respectfully submit that the present invention is patentably distinct thereover. Reconsideration and withdrawal of the rejection are respectfully requested.

In view of the amendments and remarks hereinabove, Applicants respectfully submit that the present application, including claims 1 and 3-10, are patentably distinct over the prior art. Favorable action thereon is respectfully requested.

Any questions with respect to the foregoing may be directed to Applicants' undersigned counsel at the telephone number below.

Respectfully submitted,



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